



DEPARTMENT OF
ECOLOGY
State of Washington

Small Business Economic Impact Statement

*Chapter 173-900 WAC
Electronic Products Recycling Program*

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Small Business Economic Impact Statement

Chapter 173-900 WAC Electronic Products Recycling Program

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Note: Due to size limitations relating to the filing of documents with the Code Reviser, the SBEIS does not contain full explanation of Ecology’s analysis. Additionally, it does not contain raw data or all summaries of data used in the analysis, or all of Ecology’s analysis of this data. However, this information is being placed in the rule-making file, and is available upon request for the rule file. A full analysis of compliance costs is available in the associated Cost-Benefit Analysis for this rule: <https://ecy.wa.gov/biblio/15-07-042.html>

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Executive Summary

This report presents the economic analysis performed by the Washington State Department of Ecology (“Ecology”) to estimate the degree of disproportionate impact on small businesses caused by the proposed amendments to the *Electronic Products Recycling Program* (chapter 173-900 WAC; “E-Cycle”; “the rule”) This analysis – the Small Business Economic Impact Statement (SBEIS) – are based on the best available information at the time of publication.

The Washington Regulatory Fairness Act (RFA; chapter 19.85 RCW) requires Ecology to evaluate whether the proposed rule imposes disproportionate impacts (via compliance costs) on small businesses as compared to the largest 10 percent of businesses required to comply with the rule. If disproportionate impact is found, Ecology must mitigate it as long as doing so is legal and feasible.

The proposed rule amendments make the following discretionary changes:

- Eliminate Tier 7 manufacturer registration renewal.
- Direct Ecology to send “notices of approval” electronically, rather than by mail.
- Direct Ecology to send “notices of failure to provide service” electronically, rather than by mail.
- Require retailers to provide take-home information about the E-Cycle program to consumers making in-person purchases (not online). Expand the list of example methods retailers may use to comply with the requirement to provide customers information on where and how to recycle covered electronics, to include receipt information and stickers.

In this analysis, we estimated constant ranges of costs:

- \$0 to \$250 thousand, depending on the compliance route chosen to provide take-home recycling information. The least-cost compliance approach would use receipt information and have minimal costs as part of regular business practice, as compared to using stickers.

Dividing these constant costs by a smaller number of employees inherently results in higher per-employee costs at smaller retailers.

Ecology was limited in the scope of this rulemaking in its ability to mitigate any disproportionate impacts on small businesses, as the proposed rulemaking was limited to making changes required by law, and improving adequate consumer information about where and how to recycle covered electronic products. Reducing the take-home information requirement for small businesses would not have fulfilled the intent of the authorizing statute. However, the E-Cycle program works to facilitate retailer compliance without imposing excessive burden, with assistance such as the Retailer Toolkit (<http://www.ecy.wa.gov/programs/swfa/eproductrecycle/docs/RetailerToolkit.pdf>).¹

¹ E-Cycle Washington Retailers Toolkit (2012). Updated 9/11/12.
<http://www.ecy.wa.gov/programs/swfa/eproductrecycle/docs/RetailerToolkit.pdf>

We estimated that the proposed rule, based on the OFM-IO model, would likely result in the net loss of between zero and 1.2 jobs in the state economy. Zero job loss corresponds to minimal costs incurred using receipt-based information for consumers. 1.2 jobs lost corresponds to the highest estimated sticker cost being transferred from retailers of covered electronic products to the printing industry creating the custom stickers.

Chapter 1: Background and Introduction

1.1 Introduction

This report presents the economic analysis performed by the Washington State Department of Ecology (“Ecology”) to estimate the degree of disproportionate impact on small businesses caused by the proposed amendments to the *Electronic Products Recycling Program* (chapter 173-900 WAC; “E-Cycle”; “the rule”) This analysis – the Small Business Economic Impact Statement (SBEIS) – are based on the best available information at the time of publication.

The Washington Regulatory Fairness Act (RFA; chapter 19.85 RCW) requires Ecology to evaluate whether the proposed rule imposes disproportionate impacts (via compliance costs) on small businesses as compared to the largest 10 percent of businesses required to comply with the rule. If disproportionate impact is found, Ecology must mitigate it as long as doing so is legal and feasible.

1.1.1 The Electronic Products Recycling Program

The E-Cycle program is Washington's free, convenient, and environmentally responsible electronics recycling program. It has been operational since January 1, 2009, after Ecology completed a rulemaking (chapter 173-900 WAC) implementing the Electronic Product Recycling law (chapter 70.95N RCW). Products accepted at E-Cycle Washington drop-off sites are: computers, monitors, laptops, tablet computers, televisions, portable DVD players and e-readers.

The E-Cycle program requires product manufacturers to pay for this recycling program. Through the program, registered collection sites and processors are compensated for their roles in the process of recycling the electronics made by manufacturers selling in Washington State. Registered collection sites must accept covered electronics from households at no cost. There may be a charge for at-home pick-up, curbside services, or other premium services.

For more information about producer responsibility, visit the Northwest Product Stewardship website at www.productstewardship.net.

Since its creation, the E-Cycle program has collected over 282 million pounds of electronics for recycling. This is the amount of largely valuable and/or toxic material kept out of landfills and illegal dump sites.

1.1.2 Coverage

The rule covers the actions of the following types of entities that sell covered electronics or operate as part of E-Cycle, in Washington State:

- Manufacturers
- Retailers

- Collectors
- Transporters
- Processors
- Local governments

Covered electronics include:

- Televisions
- Computers
- Computer monitors
- Portable or laptop computers including "tablet computers"
- E-readers (also called e-book readers)
- Portable DVD players

1.2 Summary of the proposed rule amendments

The proposed rule amendments make the following discretionary changes:

- Eliminate Tier 7 manufacturer registration renewal.
- Direct Ecology to send “notices of approval” electronically, rather than by mail.
- Direct Ecology to send “notices of failure to provide service” electronically, rather than by mail.
- Require retailers to provide take-home information about the E-Cycle program to consumers making in-person purchases (not online). Expand the list of example methods retailers may use to comply with the requirement to provide customers information on where and how to recycle covered electronics, to include receipt information and stickers.

The proposed rule amendments also make the following changes, driven explicitly by the law:

- Eliminate the requirement for the authority to mail two paper copies of the annual report to Ecology (RCW 43.17.095).
- Allow local governments to submit satisfaction reports either electronically or by mail, instead of both (RCW 43.17.095).
- Allow nonprofit or charitable organizations to submit annual reports either electronically or by mail, instead of both (RCW 43.17.095).
- Allow reporting entities to submit either an electronic or paper copy, instead of both (RCW 43.17.095).
- Base manufacturer share on current market share (chapter 70.95N RCW).

1.3 Reasons for the proposed rule amendments

This proposed rulemaking is required following the passage of legislation in 2013 (Chapter 305, 2013 Laws; ESB 5699). The Electronic Products Recycling Program is supported by fees paid to a stewardship organization by producers of consumer electronics subject to the rule. Most notably, the Legislature directed Ecology to implement a market-share based system to determine manufacturer responsibility from which fees will be calculated by the stewardship organization. Manufacturers' responsibility for recycling electronics will be based entirely on current sales (market share), rather than on the amount of products that were sold in the past and are just now being turned in for recycling.

This proposed rulemaking also makes changes to the requirements for the annual report filed by the authority or authorized party for the manufacturers of electronic products. This follows the passage of Chapter 292, 2013 Laws (SHB 1498) that amended chapter 70.95N RCW. In addition, other changes are needed for clarification of sufficient compliance behaviors, and clarity and editing. A legal requirement to provide an option of electronic submittal of forms also motivated elements of this rulemaking.

Chapter 2: Analysis of Compliance Costs for Washington Businesses

2.1 Introduction

We analyzed the impacts of the proposed rule relative to the baseline of the existing rule, within the context of all existing requirements (federal and state laws and rules). This context for comparison is called the baseline, and reflects the most likely regulatory circumstances that entities would face if the proposed rule were not adopted. It is discussed in Section 2.2, below.

2.2 Baseline

The baseline for our analyses generally consists of existing rules and laws, and their requirements. For economic analyses, the baseline also includes the implementation of those regulations, including any guidelines and policies that result in behavior changes and real impacts. This is what allows us to make a consistent comparison between the state of the world with or without the proposed rule amendments.

For this proposed rulemaking, the baseline includes:

- Existing requirements in chapter 173-900 WAC, Electronic Product Recycling (rule): Sets out existing requirements under the rule.
- Chapter 70.95N RCW, Electronic Product Recycling (law): Requires manufacturer shares of responsibility to be based on current market share.
- RCW 43.17.095, Option to Submit Document, Form, or Payment Electronically: Requires agencies to provide the option of electronic submittal of documents, forms, and payments.

2.3 Proposed rule amendments

The proposed rule amendments that differ from the baseline and are not specifically dictated elsewhere in law or rule, and impose a cost, include:

- Requiring retailers to provide take-home information on the E-Cycle program. Expanding the list of example methods retailers may use to comply with the requirement to provide customers information on where and how to recycle covered electronics, to include receipt information and stickers.

2.4 Take-home information at the point of sale

The proposed rule adds the requirement that the information retailers provide to customers at the point of sale of covered electronics be take-home information. It also provides additional examples of compliance with this requirement, such as stickers or information on sales receipts. We estimated a range of costs for this proposed amendment, allowing for both receipts and stickers.²

It is important to note that a large number of retailers have already been in compliance with the proposed rule through their compliance with the existing rule. Many retailers already provide information on receipts, as this is a very low-cost means of providing this information, in the same way many retailers provide other business information, promotions, and surveys. Many other retailers provide a sticker on the packaging for take-home electronics. Other retailers, however, provide on-site information, or fail to provide compliant information at all.

To provide a highly conservative overestimate of costs, we made our cost estimate based on the assumption that no retailers currently provide take-home information, or on-site information. This means actual costs of the proposed rule are undoubtedly smaller than the range estimated in this analysis.

2.4.1 Receipts as take-home information

The incremental cost of adding or changing information provided on receipts is likely to be minimal, as part of regular business practices. Retailers regularly provide other information on their receipts, and inclusion of the required E-Cycle information as part of this process is not likely to incur greater than minimal costs. If retailers decide to comply with the proposed rule using receipt information for sales of covered electronics at physical locations (take-home information is not required for online sales), the likely cost is near zero. This estimate is the bottom end of our estimated cost range.

2.4.2 Stickers as take-home information

We estimated the annual cost of using stickers as take-home information based on:

- Retail costs of large-volume custom sticker purchases, for a 2-inch round sticker, printed with website and phone number information designed and provided by Ecology on its website. The average per-unit retail price was approximately 6 cents.³

² Ecology analyses typically take into account 20-year present values. 20-year present values are a way to translate costs and benefits that occur at different points in time, such as the cost of reducing the release of toxins, resulting in benefits of reduced cancers and other health impacts in human and animal populations far into the future. In the case of the proposed rule, both costs and benefits can be represented in annual terms, because costs and benefits are not likely to occur over significantly different time frames. Specifically, take-home information provided now may not even be the reason a person recycles the purchased electronic product at the end of its life, but rather may be the reason a person recycles the product being replaced, such as an old monitor or laptop.

³ Ecology review of large-volume sales offers of 2-inch round stickers with two colors, including: Office Max, Office Depot, Sticker Giant, Sticker Mule. As of September 2015.

- Average units sold per year from the 2011 – 2013 timeframe, of approximately 4 million units. This includes online sales.⁴
 - Between 37 percent and 99 percent of units being sold at physical locations (not online), based respectively on:
 - The 63 percent of sales online in 2013 (most recent available) at electronic shopping and mail order houses. (Assumes the majority of retail sales are not in-person.)⁵
 - The 1 percent of sales online in 2013 (most recent available) at electronics and appliance stores. (Assumes the majority of retail sales are in-person, in-store pickup, or through physical stores' websites.)⁶

Using the above inputs, we estimated a range of costs for the proposed rule between \$93 thousand and \$250 thousand per year.

2.5 Summary of the likely costs of the proposed rule amendments

We estimated the costs of the rule relative to the baseline (both discussed in depth in Chapter 2 of this document). Likely costs included:

- Minimal costs of giving customers take-home information on the E-Cycle program using receipts. OR
- \$93 thousand – \$250 thousand per year costs of giving consumers take-home information on the E-Cycle program using stickers.

These are two possible ways retailers might comply with the take-home information requirement. They have been added to the list of example means of compliance explicitly stated in the proposed rule.

The estimated cost of using stickers is overestimated, because it assumes no retailers currently provide take-home information of any sort (though many do), and the upper end of the range assumes that 99 percent of purchases are made in person, although this number is based on electronics and appliance stores as a group (per available survey data), and various appliances may be purchased in-person more frequently than covered electronics.

The overall range of likely costs is between minimal and \$250 thousand, depending on the compliance route chosen to provide take-home recycling information.

⁴ Ecology records of retailer sales under the 2011, 2012, and 2013 E-Cycle program.

⁵ US Census Bureau (2015). U.S. Retail Trade Sales – Total and E-commerce: 2013 – 1998. Based on data from the Annual Retail Trade Survey.

⁶ Ibid.

Chapter 3: Quantification and Cost Ratios

3.1 Introduction

This chapter discusses the comparison of the compliance costs per employee at small versus large businesses. The affected businesses are various retailers selling covered electronic products in Washington State. We describe, in this chapter, the affected businesses, and make the required comparison of costs of the proposed rule amendments per employee at large businesses, compared to the costs per employee at small businesses.

3.2 Affected businesses

The businesses affected by the costs created by the proposed rule are retailers selling covered electronic products under the E-Cycle program in Washington State. These businesses vary in size as defined by number of employees, and may fall into a number of industry groups, as many types of stores may sell covered electronics.

NAICS	Industry	Size 1-4	Size 5-9	Size 10-19	Size 20-49	Size 50-99	Size 100-249	Size 250-499	Size 500-999	Size 1000 +
443	Electronics and Appliance Stores	453	249	100	45	26	11	0	0	0
452	General Merchandise Stores	67	48	64	172	118	154	84	*	*
453	Miscellaneous Store Retailers	1,471	509	313	191	35	6	*	0	0
454	Nonstore Retailers	458	112	82	42	15	12	*	3	*

* Undisclosed by data source.⁷

3.3 Cost-to-employee ratios

In this analysis, we estimated constant ranges of costs:

- \$0 to \$250 thousand, depending on the compliance route chosen to provide take-home recycling information. The least-cost compliance approach would use receipt information and have minimal costs as part of regular business practice, as compared to using stickers.

Dividing these constant costs by a smaller number of employees inherently results in higher per-employee costs at smaller retailers.

⁷ WA Employment Security Department (2015). Establishment Size by Number of Employees, 2014. Based on the Quarterly Census of Employment and Wages, 2014.

Whether retailers use receipt information or stickers may depend on a number of factors. Some retailers may not have receipt printers that can add information, and may choose to use stickers instead of changing equipment. In either case, costs will depend on sales at each establishment, in units of covered electronic products sold. Comprehensive information on units sold by each retailer was not available at the time of this publication.

Even if we were able to scale costs by unit sales, sales of covered electronic product units are not likely to be uniformly correlated with the number of employees at a retailer. *Ecology therefore chose to conservatively conclude that the proposed rule is likely to impose disproportionate costs on small businesses.*

Chapter 4: Actions Taken to Reduce the Impact of the Rule on Small Businesses

4.1 Introduction

If the proposed rule is likely to impose disproportionate costs on small businesses, Ecology is required by the Regulatory Fairness Act (chapter 19.85 RCW) to reduce those disproportionate impacts to the extent that is legal and feasible.

4.2 Actions taken to reduce disproportionate impacts

Ecology was limited in the scope of this rulemaking in its ability to mitigate any disproportionate impacts on small businesses, as the proposed rulemaking was limited to making changes required by law, and improving adequate consumer information about where and how to recycle covered electronic products. Reducing the take-home information requirement for small businesses would not have fulfilled the intent of the authorizing statute. However, the E-Cycle program works to facilitate retailer compliance without imposing excessive burden, with assistance such as the Retailer Toolkit (<http://www.ecy.wa.gov/programs/swfa/eproductrecycle/docs/RetailerToolkit.pdf>).⁸

The toolkit provides flexible suggestions for how retailers can comply with rule requirements. Small businesses do not need to design their own E-Cycle information or graphics as these are provided in the Toolkit as logo print files. If they choose to provide alternative information, short blurbs and minimum requirements are provided as well. This reduces design and management costs, or contractor costs, that might otherwise be incurred.

⁸ E-Cycle Washington Retailers Toolkit (2012). Updated 9/11/12.
<http://www.ecy.wa.gov/programs/swfa/eproductrecycle/docs/RetailerToolkit.pdf>

Chapter 5: The Involvement of Small Businesses and Local Government in the Development of the Proposed Rule

Ecology is involving small businesses in the development of this rulemaking. Local governments are not impacted in any way by the proposed rule and will not be specifically contacted.

Small businesses will be involved through the following actions by the Waste 2 Resources Program (W2R):

1. Interested parties on the Washington Recycles Electronics ListServ will be notified of the rule making.
2. W2R staff will attend a meeting of the Board of Directors of the WA Materials Management & Financing Authority to discuss the rule making and its impact on manufacturers including small businesses.
3. A national industry trade group, the Consumer Electronics Association will be notified of the rule making.
4. The WA Retail Association will be notified of the rule making.
5. The Association of WA Business will be notified of the rule making.

Small businesses or their representatives will be able to comment on the proposed rule as part of the official public comment period following rule proposal.

Chapter 6: The SIC (NAICS) Codes of Impacted Industries

The SIC (Standard Industry Classification) system has long been replaced by the North American Industry Classification System (NAICS).⁹ The proposed rule imposes likely costs on retailers that sell covered electronic products. These include stores selling specifically electronics, as well as stores selling covered electronics as part of a broader inventory of goods. These stores are likely to be in the following NAICS code groups:

- 443 – Electronics and Appliance Stores
- 452 – General Merchandise Stores
- 453 – Miscellaneous Store Retailers
- 454 – Nonstore Retailers (if they have any physical sales locations)

⁹ US Census Bureau (2012). North American Industry Classification System.
<http://www.census.gov/eos/www/naics/>

Chapter 7: Impacts on Jobs

We used the Washington State Office of Financial Management's 2007 Washington Input-Output Model (OFM-IO) to estimate the proposed rule's secondary impact on jobs across the state.¹⁰ This methodology estimates the impact as reductions or increases in spending in certain sectors of the state economy flow through to purchases, suppliers, and demand for other goods. Compliance costs incurred by an industry are entered in the OFM-IO model as a decrease in spending and investment. If that money is spent in another industry (on stickers, for example), it is entered in the model as an increase in production.

We estimated that the proposed rule, based on the OFM-IO model, would likely result in the net loss of between zero and 1.2 jobs in the state economy. Zero job loss corresponds to minimal costs incurred using receipt-based information for consumers. 1.2 jobs lost corresponds to the highest estimated sticker cost being transferred from retailers of covered electronic products to the printing industry creating the custom stickers.

¹⁰ WA Office of Financial Management (2014). 2007 Washington Input-Output Model. Last Revised September 2014. <http://www.ofm.wa.gov/economy/io/2007/default.asp>

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